

Interview Summary

Application No.

10/800,170

Applicant(s)

WILLIAMSON, LARRY DON

Examiner

Christina Johnson

Art Unit

1732

All participants (applicant, applicant's representative, PTO personnel):

(1) Christina Johnson.(3) Patrick Butler.(2) Larry Williamson.(4) James Bradley.

Date of Interview: 13 March 2007.

Type: a) ☐ Telephonic b) ☐ Video Conference
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: _____.

Claim(s) discussed: proposed amendments.

Identification of prior art discussed: Jaques, Huffaker, and Stanga.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's representative discussed the instant claims and the differences between the claims and the prior art cited in the previous office action. Examiner agreed to consider such when Applicant files next response.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

PROPOSED

ABSTRACT

~~In accordance with this invention a~~ compaction unit (100) is provided that includes: (a) an elongated open-ended ramming chamber (50) having a fill port opening (51), ~~a longitudinal bore (52), a compression end (53), and an extrusion end (57), (b) a~~ ramming head (20) pushes material within ~~compression end (53) of ramming chamber (50) along longitudinal bore (52), (c) to add a new lift to a continuous homogeneous block (40) comprised of all previously compressed material occupies the bulk of the extrusion end (57) of ramming chamber (50), and functions as an integral part of the compaction unit (100), (d) a hydraulic cylinder (10) (part of an actuator) provides movement to ramming head (20) to compress the loose block making material (40A) (e.g., earth) against block (40). This forms a new lift (40B) that is effectively fused with the previous lift (40C) to form a continuous homogeneous block (40) of relatively high density material that exits the compaction unit (100). As the ramming head (20) moves forward, it closes off the fill port opening (51). A shearing chamber (60) fractures the blocks to any desired length, while a support platform (70) supports and stores the blocks until utilized. The shearing chamber (60) moves transverse to the ramming chamber to form the fracture. A process is described that utilizes standard construction equipment and a modified lifting device to hoist and place the blocks within a building system. Additionally, a special design feature (22) is incorporated into ramming head (20) to increase the "frictional threshold" of the material being compressed within chamber 50.~~

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Claims:

1-24 (Cancelled)

25. (Currently Amended) A method for producing a compressed earth block, the method comprising:

(a) providing a compression chamber with an elongated bore having an open outlet end ;
(b) introducing into the bore of the compression chamber an amount of uncompressed earth; then

(c) forcing the uncompressed earth toward the outlet end, which is blocked by previously compressed lifts of earth, against which the uncompressed earth is compressed into a new lift within the compression chamber; and

(d) repeating steps (b) and (c) to provide a plurality of lifts compressed together within the compression chamber into a continuous length of compressed earth ~~that protrudes out the open outlet end; and~~

(e) separating an outer end portion from the continuous length to define a compressed block; and

wherein step (e) comprises mounting a shearing chamber to the outlet end of the compression chamber and pushing the outer end portion of the continuous length from the compression chamber into the shearing chamber; and

when the outer end portion of the continuous length protrudes out the open outlet end of the compression chamber by an amount equal to desired length of the block, moving the shearing chamber transverse to the bore of the compression chamber to shear the outer end portion from the continuous length.

26. (Currently Amended) The method of claim 25, wherein step (e) further comprises pushing the portion of the length of compressed earth out the outlet end into and through attaching a an outlet end of the shearing chamber onto a forward end of a support structure, such that then moving the movement of the shearing chamber transverse to the bore of the compression chamber to shear said portion from the continuous length causes the forward end of the support

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structure to move transverse to the bore of the compression chamber in unison with the shearing chamber.

27. (Currently Amended) The method of claim 25, wherein step (eb) comprises moving the feeding the uncompressed earth into the compression chamber from a direction transverse to the bore compression chamber transverse to the bore an amount less than a transverse dimension of the bore.

28. (Currently Amended) The method of claim 25, wherein the transverse movement of the shearing chamber in step (ee) comprises applying pressure from an actuator to a ramming plate in an amount greater than an opposing frictional threshold force exerted by the previously compressed lifts occurs while step (c) simultaneously continues.

29. (Cancelled)

30. (Currently Amended) The method of claim 25, wherein step (d) further comprises varying the length of said the outer end portion of the continuous length of compressed earth protruding from the compression chamber by varying the quantity of lifts within the outer end portion of the continuous length.

31. (Currently Amended) The method of claim 25, wherein said the outer end portion of the continuous length of compressed earth protruding from the compression chamber in step (d) is made up of a plurality of lifts and has a length greater than 6 inches.

32. (Currently Amended) The method of claim 25, wherein said portion of the continuous length of compressed earth protruding from the shearing chamber in step (e) has a bore with substantially the same dimensions as the bore of the compression chamber in step (d) is made up of a plurality of lifts and has a weight greater than 100 pounds.

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33. (Currently Amended) A method for producing a compressed block of earth, the method comprising:

- (a) providing a compression chamber with an elongated bore having an open outlet end;
- (b) introducing into the bore of the compression chamber an amount of uncompressed earth by feeding the uncompressed earth into the bore of the compression chamber from ~~an~~ port in ~~a forward portion of the compression chamber~~; then
- (c) while the port remains open, stroking a ram into the bore of the compression chamber ~~progressing from the forward portion of the chamber towards the open outlet end~~; to apply a force to the uncompressed earth greater than an opposing frictional threshold force of all lifts of previously compressed earth in the bore; then
- (d) moving the ram in a rearward direction and repeating steps (b) and (c) to force a continuous length of compressed earth made up of a plurality of the lifts toward and out the outlet end; and
- (e) at when a selected an outer end point portion of the continuous length protrudes from the outlet end of the compression chamber for a selected length, shearing the outer end at least part portion of the continuous length ~~protruding from the outlet end~~ from the remaining portion of the continuous length to define a compressed block

34. (Currently Amended) The method of claim 33 further comprising forming mating indentations and protrusions on side surfaces of the continuous length of compressed earth as it is being formed and passes through the outlet end, so that ~~upon~~after shearing, an indentation on one of the compressed blocks ~~will mate~~is mateable with a protrusion of another block to form interlocking surfaces.

35. (Previously Presented) The method of claim 33, wherein the compressed block is made up of a plurality of the lifts.

36. (Currently Amended) The method of claim 33, further comprising:

- placing a shearing chamber at the outlet end of the compression chamber; wherein

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step (d) comprises incrementally moving the continuous length directly from the outlet end into the shearing chamber with each of the strokes in step (c) until the outer end portion of the continuous length protrudes from the outlet end of the compression chamber by the desired length; and

step (e) comprises moving the shearing chamber transverse to the longitudinal axis.

37. (Previously Presented) The method of claim 33, further comprising:

providing the ram with a convex protrusion, and engaging the uncompressed earth with the protrusion.

38. (Currently Amended) The method of claim 33, wherein step (e) ~~further comprises:~~

~~after shearing the compressed block from the continuous length, causing the ram to push the compressed block forward onto~~ comprises mounting a forward end of a supporting surface with the next stroke in step (e) to an outlet end of the shearing chamber, causing part of the outer end portion to be pushed onto the supporting surface, then moving the forward end of the supporting surface in unison with the compression chamber transverse to the longitudinal axis.

39. (Currently Amended) The method of claim 33, wherein at the conclusion of step (d) and before step (d), further comprises moving the ram a rearward ~~forward side of the ram will be until spaced forward of the ram is longitudinally rearward~~ of the port in the compression chamber.

40. (Previously Presented) The method of claim 33, wherein the length of the forward stroke in step (c) is substantially shorter than a longitudinal length of the compression chamber.

41. (Previously Presented) The method of claim 33, wherein as the ram moves forward in step (c), it closes off the port.

42. (Currently Amended) A method for producing a compressed block of earth, the method comprising:

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(a) providing a compression chamber with a longitudinal bore of constant cross-sectional dimension that ends with an open outlet end, a hopper having a fill port on an upper side of the compression chamber communicating with the bore, and a ram that is movable within the bore from a retracted position on one side of the fill port to an extended position between the fill port and the outlet end;

(b) positioning a shearing chamber and a support structure at the outlet end of compression chamber, the shearing chamber having a bore with a cross-sectional dimension substantially the same as the cross-sectional dimension of the bore of the compression chamber;

(b) while the ram is in the retracted position, feeding a batch of uncompressed earth into the bore from the hopper through the fill port; then

(c) while the fill port and the outlet end are open, stroking the ram forward, the ram closing the fill port as it moves toward the extended position, the forward movement of the ram to force forcing the uncompressed earth contained in the compression chamber against previously compressed lifts of earth in the compression chamber to add a newly compressed lift to the previously compressed lifts, and when the force exerted by the ram overcomes the frictional threshold of the combined mass of the previously compressed lifts and the newly compressed lift, advancing the combined mass an increment a pre-selected distance forward; then

(d) moving the ram to the retracted position and repeating steps (b) and (c), thereby fusing each newly compressed lift with all previously compressed lifts to form a continuous length of compressed earth, which progressively exits the outlet end into the shearing chamber with each newly formed lift;

(e) when a desired length of the compressed earth has moved through the shearing chamber onto the support structure, actuating moving the shearing chamber vertically relative to the compression chamber a distance less than a vertical dimension of the bores to sever a compressed block of the desired length, which is fully supported on the support structure.

43. (Currently Amended) The method of claim 42 further comprising forming mating indentations and protrusions on side surfaces of the continuous length of compressed earth as it is being formed and passes through the compression chamber, the indentations and protrusions being configured so ~~upon~~ that after shearing, an indentation of one of the compressed blocks will

PROPOSED

mate is mateable with a protrusion of another of the compressed blocks to form interlocking surfaces.

44. (Currently Amended) The method of claim 42, wherein ~~the shearing chamber of step (b) has open forward and rearward ends, and wherein step (e) further comprises:~~

moving a forward end of the support structure vertically in unison with the shearing chamber transverse to the longitudinal bore of the compression chamber.